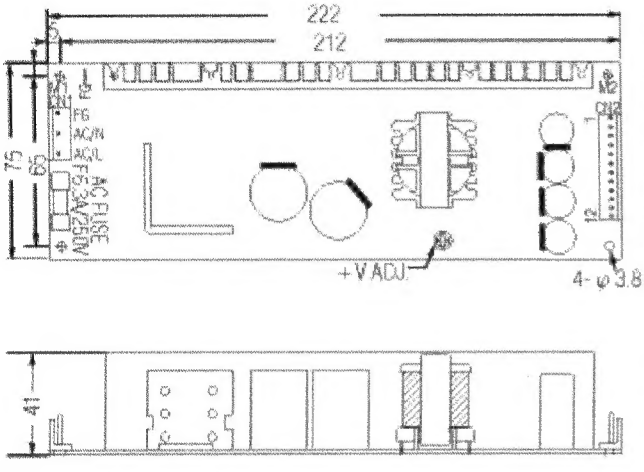
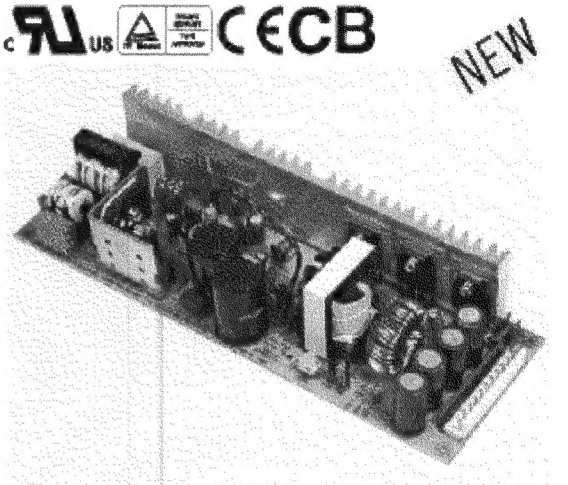
150W Single Output

Features

- Universal AC input or auto switch
- High efficiency, low working temp.
- Low cost, high reliability
- Built in EMI filter, low ripple noise
- Compact size, light weight
- Short circuit protection
- Over load/ voltage protection
- 100% full load burn-in test
- ISO-9001 manufacturer
- PFC 0.98 for LPP series





222× 75× 41 mm

Specification

Input voltage..... 88~132VAC/ 176~264VAC auto sw. (LPS series)
85~264VAC; 120~370VDC (LPP series)
Input frequency.....47-63Hz
Inrush current.....cold start, 30A/ 115V, 60A/ 230V
Output voltage.....refer to below table (± 10% ADJ.)
Overload protection. 105%~140% pulsing mode, auto recovery (LPS series)
105%~150% constant current limiting (LPP series)
Over voltage protection.....110%~135% of output voltage
Setup, rise, hold up time.....600ms, 50ms, 20ms
Withstand voltage.....I/P-O/P:3KV, I/P-FG:1.5KV, 1min.
Working temp.....0-50℃@100%, -10℃@80%, 60℃@60% with 18CFM
Safety standard.....UL 1950, TUV EN60950
EMC standard.....EN55022 class A (LPS series)
class B (LPP series)

EN61000-4-2,3,4,5,6,8,11

EN61000-3-2,3

Connection.....12p/ 3.96mm, JST VH

Weight/ packing.....0.6kgs/ 30pcs/ 1.89CUFT

❖LPS series (UL, TUV, CE pending)

Stock No	Type No	Output	Tol.	R&N	Effi.	P.P.
12311	LPS-150-3.3	3.3V, 30A	± 3%	100mV	69%	80
12312	LPS-150-5	5V, 30A	± 3%	100mV	74%	80
12313	LPS-150-7.5	7.5V, 20A	± 2%	100mV	77%	80
12314	LPS-150-12	12V, 12.5A	± 2%	100mV	79%	80
12315	LPS-150-13.5	13.5V, 11.2A	± 2%	100mV	79%	80
12316	LPS-150-15	15V, 10A	± 2%	150mV	80%	80
12317	LPS-150-24	24V, 6.3A	± 1%	150mV	80%	80
12318	LPS-150-27	27V, 5.6A	± 1%	200mV	81%	80
12319	LPS-150-48	48V, 3.2A	± 1%	200mV	81%	80

❖LPP series

Stock No	Type No	Output	Tol.	R&N	Effi.	P.P.
12331	LPP-150-3.3	3.3V, 30A	± 3%	100mV	69%	94
12332	LPP-150-5	5V, 30A	± 3%	100mV	75%	94
12333	LPP-150-7.5	7.5V, 20A	± 2%	100mV	76%	94
12334	LPP-150-12	12V, 12.5A	± 2%	100mV	80%	94
12335	LPP-150-13.5	13.5V, 11.2A	± 2%	100mV	80%	94
12336	LPP-150-15	15V, 10A	± 2%	100mV	81%	94
12337	LPP-150-24	24V, 6.3A	± 1%	100mV	83%	94
12338	LPP-150-27	27V, 5.6A	± 1%	100mV	84%	94
12339	LPP-150-48	48V, 3.2A	± 1%	150mV	84%	94

MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

LPP-15(SERIES

.LOW COST, HIGH RELIABILITY
.105℃ OUTPUT CAPACITOR
.INTERNATIONAL AC INPUT RANGE
.HIGH EFFICIENCY, LOW WORKING TEMPERATURE
.SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
.SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
.COMPACT SIZE, LIGHT WEIGHT
.100% FULL LOAD BURN-IN TEST
.BUILT IN EMI FILTER, LOW RIPPLE NOISE
.BUILT IN PFC CIRCUIT

SPECIFICATION / MODEL	LPP-150-3.3	LPP-150-5	LPP-150-7.5	LPP-150-12	LPP-150-13.5	LPP-150-15	LPP-150-24	LPP-150-27	LPP-4
DC OUTPUT VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48
OUTPUT V. TOLERANCE	2%	2%	2%	2%	2%	2%	1%	1%	1
OUTPUT RATED CURRENT	30A	30A	20A	12.5A	11.2A	10A	6.3A	5.6A	3.2
OUTPUT CURRENT	0-30A	0-30A	0-20A	0-12.5A	0-11.2A	0-10A	0-6.3A	0-5.6A	0-3.
RIPPLE & NOISE	100mV	100mV	100mV	100mV	100mV	100mV	150mV	150mV	250
LINE REGULATION	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.
LOAD REGULATION	1%	1%	1%	1%	1%	1%	0.5%	0.5%	0.
RATED OUTPUT POWER	99W	150W	150W	150W	151.2W	150W	150W	151.2W	153.
EFFICIENCY	66%	72%	76%	79%	80%	80%	83%	83%	84
DC VOLTAGE ADJ.	CH1:+10,-5%								
INPUT VOLTAGE RANGE	85~264VAC 47~63Hz 120~370VDC								
AC CURRENT	2.2A/115V 1.1A/230V 3.3V: 1.5A/115V 0.8A/230V								
INRUSH CURRENT	COLD START 40A/230V								
LEAKAGE CURRENT	<3.5 mA/240VAC								
OVERLOAD PROTECTION	105~150% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY								
OVER VOLTAGE PROTECTION	110%~135% TYPE:SHUTDOWN RESET:RE POWER ON								
TEMP. COEFFICIENT	0.05% / ℃ (0~50℃)								
SETUP, RISE, HOLD UP TIME	600ms, 30ms, 20ms								
POWER FACTOR	PF>=0.96/230VAC, PF>=0.98/115VAC								
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES								
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms								
WORKING TEMP., HUMIDITY	-10℃~+60℃ WITH COOLING FAN (REFER TO OUTPUT DERATING CURVE), 20%~9C RH								

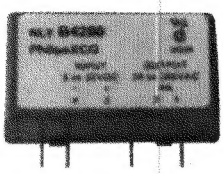
STORAGE TEMP., HUMIDITY	-20℃~+85℃, 10%~95% RH
DIMENSION	222*75*41mm (L*W*H) ONLY PCB
WEIGHT	550gs
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED
EMC STANDARDS	CISPR22 (EN55022) CLASS B, EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-3-2,-3 VERIFICATION

NOTE : 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25℃ AMBIENT.
2.TOLERANCE INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.

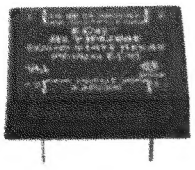
NEXT (MECHANICAL INFO)

Series S

Solid State, 3 and 4 Amp Relays, SPST-Normally Open



Upright



Flat Pack

- 3-32 VDC Logic Compatible Input
- 4000 Vrms Optical Isolation
- Zero Voltage Switching
- Output Rated at 600 PIV
- Internal RC Snubber
- Compact Package for PC Board Mounting
- Fits Standard 1/O Mounting Boards
- Flatpack (F-Suffix)

Ratings

	Input Section							Output Section				
Type	Control Signal Range Volts	Input Imped. Ohms Min.	Must Operate Voltage Volts	Must Release Voltage Volts	Nom. AC Voltage RMS 47-70 Hz Volts	RMS Current Amps	Non Repetitive One Cycle Surge Current 60 Hz RMS Amps	Line Voltage Range 47-70 Hz VAC	Off-State Current at Nom. RMS Voltage mA	Peak On-State Voltage at Rated RMS Current V_{TM} Volts Max.	Min. Load Current mA	Peak Transient Over Voltage Volts
RLYB4280	3-32 DC	1500	3	1	280	4	100	24-280	8	1.6	50	600
RLYB4280F	3-24 DC	1500	3	1	280	3	100	24-280	8	1.6	50	600

dv/dt.....200 V/µS
Duty.....Continuous
Operating and Storage Temperature.....-40°C to +100°C
Dielectric.....4000 Vrms
Coupling Capacitance.....3pF
Turn On/Turn Off Time.....8.3 mS

Accessories - Sockets

Description	Type No.
1-Position Socket	RLY9141
2-Position Socket	RLY9142
4-Position Socket	RLY9144

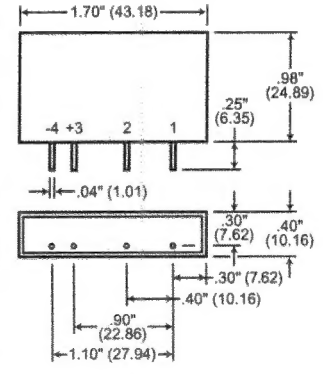


Fig R6 (Upright)

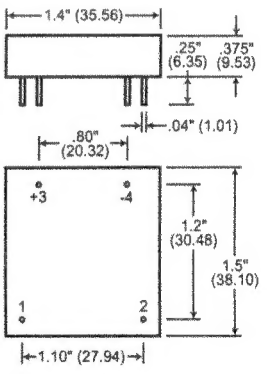
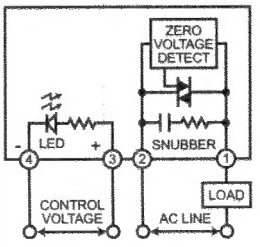
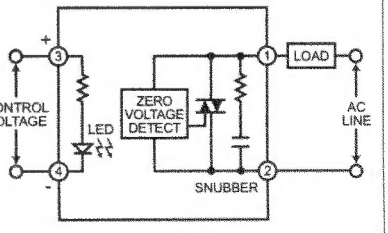


Fig R6-1 (Flatpack)



Schematic (Upright)



Schematic (Flatpack)